RESPONSES TO COMMENTS ON THE DRAFT 2010 SFER – VOLUME I, CHAPTER 8

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Level of Panel Review: Accountability (primary); Integrative (secondary)
Reviewers: Robert Ward (AA) and Otto Stein (A)

Chapter 8 is a very brief update on the implementation status of the Long-Term Plan – a plan to ensure that all discharges to the Everglades Protection Area (EPA) achieve and maintain water quality standards. Figure 8-1 indicates the location of Long-Term Plan basins. Table 8-1 lists Long-Term Plan projects and references the reader to other sections of the SFER for implementation updates on most of projects. Chapter 8, itself, updates progress on nine specific projects while six projects will be updated in future reports. The measure of success employed in Chapter 8 is implementing projects on schedule.

Accountability Review

General questions considered, per SOW:

1. Does the draft document present a defensible account of data and findings for the areas being addressed that is complete and appropriate?
2. Is the synthesis of this information presented in a logical manner, consistent with earlier versions of the Report?
3. Are findings linked to management goals and objectives?

Specific Questions:

1. On lines 20-21 and 85 there is reference to a description of expedited projects to be found in Chapter 7A. Chapter 7B discusses RECOVER projects while Chapter 7A discusses Comprehensive Everglades Restoration Plan (CERP) projects. Should the reference be to Chapter 7B on these lines? If not, more clarification is needed.

   Response: *The cross-reference to Chapter 7A – which provides an update on Everglades Restoration projects, including Expedited Projects (see bulleted list on page 7A-3) – is correct. Two of the Expedited Projects discussed in Chapter 7A, the EAA Compartment B STA and the EAA Compartment C STA, are Long-Term Plan projects, not CERP projects. These two projects are being implemented with Long-Term Plan funding and are part of the state's strategy for achieving compliance with the phosphorus criterion in the Everglades Protection Area. CERP (including RECOVER) and the Long-Term Plan are separate programs. CERP is a 50-50 cost-share program in which the District and the federal government are partners, while the Long-Term Plan is a District-funded program which uses non-federal dedicated funds, i.e., the Everglades Trust Fund (see Chapter 13 of this volume).*

2. The *River of Grass* land acquisition is discussed in Chapter 7A (page 7A-30), but chapter 8 only hints at the potential impact of this land acquisition on the Long-Term Plan implementation (lines 199). While it is realized that there are many details yet to be worked out on the *River of Grass* acquisition and implementation, the potential, or lack thereof, of this development to impact the Long-Term Plan should be acknowledged.

Response: At this time, there is much uncertainty about what future impact the proposed River of Grass acquisition may have on the Long-Term Plan. It is agreed that this should be acknowledged, and a general statement about the River of Grass effort will be added to the final Chapter 8 text as follows: "As a result of the proposed River of Grass acquisition (see Chapter 7A of this volume), the long-term strategy for Everglades restoration may result in significant revisions to the Long-Term Plan. Future updates to this chapter will reflect any further revisions to the Long-Term Plan, as developed."

3. Forty-five projects are listed in Table 8-1. Line 99 says there are more than 50 individual projects. Is there a complete listing for reference?

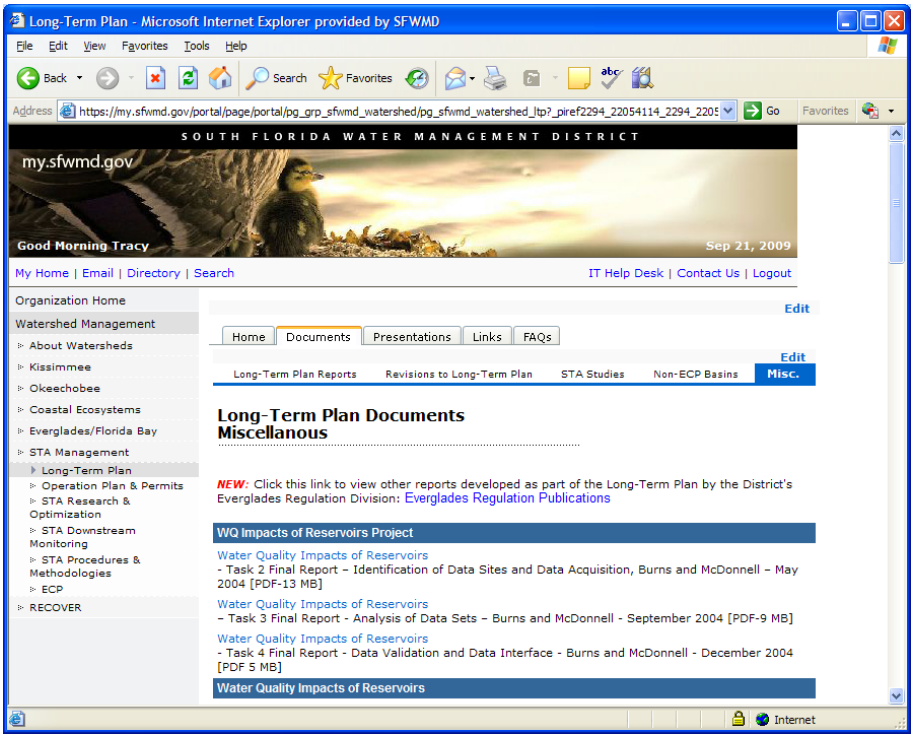
   Response: Table will be updated to show three additional projects, and text will be revised to say "48 individual projects".

4. Per lines 137-138, is the main use of DMSTA in the future to be diagnostic rather than design? Or are there additional STAs to be designed in the future?

   Response: DMSTA can be used for both diagnostic and design in the future. It is entirely possible that STAs will be designed in the future, for example, as part of the proposed River of Grass or other agency restoration programs.

5. Given that the Water Quality Impacts of Reservoirs Project was completed in 2005, why is there an 'update' in the 2010 SFER? It was not clear on the link provided on line 166 which reports were associated with this project.

   Response: Since its completion, the Water Quality Impacts of Reservoirs Project has been included in annual updates of Chapter 8 for informational purposes so readers are aware that the data compiled as part of the project (and the associated database) are still available. The three reports on this project are available from the District's web site at www.sfwmd.gov, from the Long-Term Plan web page, under Documents tab, and Misc. sub- tab), as shown below:



6. The Basins with Limited Data section notes that the work was completed in FY 2007 and the results included in a January 2007 report (line 189). Why is this project being 'updated' in the SFER 2010? On line 190 there is reference to a document that can be viewed via a link. The exact title of this document is not clear, thus it could not be located on the provided link.

   Response: Similar to response to comment #5 above, the Basins with Limited Data Project was also included in draft Chapter 8 so readers were aware that the report was still available. However, since the document is outdated and not relevant to this year's SFER, it has since been removed from the District's web site and the final chapter will be revised accordingly.

7. Has the reason for the assumption, noted on lines 204-205, not being true, been described elsewhere? Is there a reference to a discussion of why Lake Okeechobee flows and TP loads are not meeting the earlier assumptions?

   Response: The change in the capacity of STA-3/4 to treat Lake Okeechobee regulatory releases has been discussed at numerous public meetings in recent years. Briefly, the change is due to multiple factors, including higher volumes of EAA runoff than originally assumed, a much lower target STA outflow concentration (initial target was 50 ppb, long-term target is closer to 10 ppb), and higher TP concentrations of Lake Okeechobee releases due to the 2004–2005 hurricane impacts.

8. Lake Okeechobee provided only 4% of the flow *and* also *exactly* 4% of the TP loading to the STA as a *whole* or to STA 3-4 only and for this year only or for the period-of-record. Italics inferring data to be double checked and/or clarification needed.

   Response: The 4% number applies to the estimated long-term average annual inflow volume and inflow TP load that will be treated by STA-3/4. In other words, on a long-term average annual basis, approximately 4% of the inflows to STA-3/4 (by volume and TP load) will be Lake Okeechobee regulatory releases. The other 96% will be EAA runoff on a long-term average annual basis.

9. In the 'Adaptive Implementation' section, beginning on line 218, there is mention of the recommendation to establish a dedicated funding source to facilitate adaptive implementation. Has any progress been made on this recommendation?

   Response: The original (2003) Long-Term Plan recommendation was to establish $36 million in dedicated funding for Adaptive Implementation. Since the Long-Term Plan's inception, the District has dedicated over $1 billion in Adaptive Implementation funding for the plan, i.e., the original Long-Term Plan cost was $444 million through FY2016, and the current estimated cost for implementing the plan is $1.5 billion through FY2016.

Integrative Review

General questions considered:

1. Are large programs presented so that the overall goals are clear and linked systematically to descriptions across the Report?
2. Is the chapter cross-referenced in a thorough and consistent manner?
3. The panel may also provide constructive criticism and guidance for the District's large-scale programs, as appropriate.

From an integrative perspective, the briefness of Chapter 8 makes it difficult for the reader fully understand connections of the Long-Term Plan to the Comprehensive Everglades Restoration Plan (Chapter 7A) and RECOVER projects (Chapter 7B). Given the common project update objectives of Chapters 7A, 7B, and 8 and the need to understand the relationships between the three major initiatives being discussed, would it be possible to combine the three project implementation updates into one Chapter with one over-arching introduction to the relationships involved. As it stands now, Chapter 7A provides the best introduction to the large project initiatives and it comes first in the report; thus, it may suffice for such an overall introduction, IF the relationships were more clearly defined AND each of the other Chapters, 7B and 8, referenced the explanation in 7A.

Response: As noted above, the Long-Term Plan is being implemented through a specific District program using dedicated funds (non-federal) and is focused on achieving water quality standards in the Everglades Protection Area. CERP is a joint federal and District program (50-50 cost-share) with multiple goals including ecosystem restoration, water supply, and flood protection. In consolidated reports, Chapter 8 has covered information on the Long-Term Plan to show progress and status every year since Fiscal Year 2004. Primarily, Chapter 7 has focused on CERP but, since the 2009 SFER, this chapter is more comprehensive and includes discussion of other Everglades Restoration efforts, including some Long-Term Plan projects. It is agreed that the chapters need to improve on showing the relationship between the Long-Term Plan and CERP, and such clarification will be provided in the final version.

Chapter 8 is written in a very general manner without specific reference to data to back up conclusions. Several places where this is particularly noticed are questioned below. The integrative nature of the SFER could be enhanced if Chapter 8 cross referenced its Long-Term Plan implementation update with citations to specific sections and conclusions contained in other chapters.

Specific Questions:

1. How is the dataset update described in lines 168-181 related to DBHYDRO? Is the dataset simply data pulled from DBHYDRO for a specific purpose? Are the results of the update baseline datasets, referred to on line 178, the Draft Deliverable 3.3.1: Technical Memorandum – Updated Basin Data, March 27, 2008?

   Response: The Update Baseline Datasets Project consists of extracting flow and water quality data from DBHYDRO every other year to improve the degree of confidence in the accuracy of the data used to predict long-term STA performance and, in those basins that do not currently have STAs, to improve the accuracy of the predicted flows and loads discharged directly to the Everglades Protection Area. The datasets are currently being updated (scheduled completion date is October 2009), and the previous update was completed in October 2007. The document referenced above in the panel's question, "Draft Deliverable 3.3.1: Technical Memorandum – Updated Basin Data, March 27, 2008" was essentially the same as the October 2007 Update Baseline Datasets report. On page 3 of the March 2008 document, the following is stated: "The most recent update to the historical data for the basins tributary to the Everglades Construction Project (ECP) was completed in 2007 (Goforth 2007a, Goforth 2007b). This Technical Memorandum contains a summary of that update, which utilized historical data from water year (WY)1995 to WY2007." A study completed in 2008 relied upon the 2007 Update Baseline Datasets; therefore, one of the task deliverables for that study required the consultant to summarize the 2007 Update Baseline Datasets (hence, the 2008 document with same information as the 2007 effort).

2. The comment about water quality conditions improving in areas of the EPA downstream of STA discharges does not provide a reference for this conclusion. Chapter 3A of the 2010 SFER presents data to confirm this conclusion and should be referenced in lines 297-298.

   Response: *Per the panel's suggestion, the following text will be added to page 8-12 for clarification: "As described in Chapter 3A of this volume, TP concentrations in the inflows to the Refuge, WCA-2, and WCA-3 for WY2009 were the lowest of the baseline, Phase I, and Phase II monitoring periods."*

3. The Long-Term Plan's goal is to have all discharges to the Everglades Protection Area achieve and maintain water quality standards in the EPA. Chapter 3 presents data regarding the status of standard achievement, but it is not specifically interpreted in terms of Long-Term Plan accountability. Using water quality information strategies discussed in the Panel's review of Chapter 3A, it may be possible to develop a water quality standard achievement index for Long-Term Plan accountability (not just project-by-project implementation and/or load reductions, but total integrated Plan accountability via trends in water quality standard compliance).

   Response: *The panel's suggestion is intriguing and may be considered in future SFERs. However, it will be difficult to make a clear connection between water quality changes and Long-Term Plan activities, considering that other factors can dramatically impact water quality such as severe weather, drought, hurricanes, wildfires, etc. In other words, there could be years when both STA performance and BMP performance are in compliance with all mandates and are meeting all expectations, while other factors could still cause negative trends in Everglades water quality. In such instances, it would not be appropriate to try to determine Long-Term Plan accountability.*